

ABSTRACT OF THE DISCLOSURE

A system is provided for positioning separate portions of a sample in elongate, parallel channels of a sample chamber and for irradiating a sample in the chamber to create a diffraction pattern where the sample and chamber differ in refractive index. The system also can measure absorption of electromagnetic radiation by a sample in the chamber, and can measure the absorption simultaneously with measurement of diffraction by the sample.

10

15

20

25

30

35